

What is claim d is:

1. A method of binding a stack of pages to form a book comprising the steps of:

placing a flyleaf inside a book cover, a spine of the flyleaf affixed to a spine of the book cover;

placing an electrically resistive strip adjacent an inside of the flyleaf spine of a book cover, the strip having a hot-melt adhesive in contact therewith;

positioning a stack of pages desired to be bound inside the flyleaf, a binding edge of the page stack adjacent the strip, to form a book assembly;

passing an electrical current along the strip to create heat sufficient to melt the adhesive, melted adhesive serving to bind together the binding edge of the page stack and to affix a first and a last page of the page stack to the flyleaf adjacent the flyleaf spine;

applying pressure to an outside of the flyleaf adjacent the strip and along the page stack binding edge, the strip positioned between the flyleaf spine and a region of pressure application;

stopping the electrical current; and

permitting the adhesive to solidify.

2. The method recited in Claim 1, wherein the pressure-applying step causes a section of the flyleaf adjacent the pressure-application region to at least partially fold over lateral edges of the strip.

3. The method recited in Claim 1, wherein the positioning step comprises surrounding at least a portion of a free edge of the page stack with a page stack carrier, the free edge opposed to the binding edge, for retaining an alignment of the pages during the pressure-applying and current-passing steps.

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4. The method recited in Claim 1, wherein the page-stack-positioning and the pressure-applying steps comprise placing the page stack in a substantially squared-U-shaped holder having sides comprising jaws and an adjustable width between the jaws, and clamping the jaws about the book assembly along a spine region thereof.

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5. The method recited in Claim 4, further comprising the step, prior to the adhesive solidification, of pressing the page stack against the strip while the adhesive is melted.

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6. The method recited in Claim 1, wherein the adhesive solidification step comprises retaining the book assembly in the holder until the adhesive is substantially completely solidified.

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7. The method recited in Claim 1, wherein the electrical current passing step comprises attaching a lead to each end of the strip, connecting the leads to a power supply, and activating the power supply.

8. The method recited in Claim 7, further comprising the step, prior to the adhesive solidification, of pressing the page stack against the strip while the adhesive is melted.

5 **9.** The method recited in Claim 8, wherein the page stack pressing step comprises applying a scrubbing motion to the page stack for increasing contact between the page stack binding edge and the melted adhesive.

10 **10.** The method recited in Claim 7, wherein the power supply activating step comprises applying a binding voltage of approximately 5 volts rms to yield a binding current of approximately 5 amperes rms.

15 **11.** The method recited in Claim 1, wherein the strip-placing step comprises applying an adhesive material to a back of the strip and adhering the strip back to the flyleaf spine therewith.

12. The method recited in Claim 11, wherein the adhesive material comprises a pressure-sensitive tape.

20 **13.** The method recited in Claim 1, further comprising the step of making the book cover, comprising the steps of affixing together a front cover piece, a back cover piece, and a spine, a lateral edge of the spine adjacent a respective inner edge of the front and the back cover pieces.

14. The method recited in Claim 13, wherein the affixing step comprises affixing a flexible covering to an outside of the front and the back cover pieces and the spine in covering relation to at least a seam region where the lateral edges of the spine
5 meet the respective inner edges of the front and the back cover pieces.

15. The method recited in Claim 14, further comprising the step, prior to the flyleaf-placing step, of affixing a liner to an inside of the front and the back cover pieces and the spine in covering relation to at least a seam region where the lateral edges of
10 the spine meet the respective inner edges of the front and the back cover pieces.

16. The method recited in Claim 1, further comprising the step, prior to the strip-placing step, of trimming the strip to a desired dimension commensurate with a dimension of the page stack binding edge.

17. The method recited in Claim 1, wherein the pressure-applying step comprises:

temporarily positioning a pair of elongated spacers between the book cover and the flyleaf outside, the spacers between each cover portions of the flyleaf
20 and a front and a rear of the cover piece, the strip between the flyleaf spine and the spacers; and

after the electrical current passing step, applying a clamping pressure to opposed sides of an outside of the cover adjacent the spacers.

18. The method recited in Claim 1, wherein:

the positioning step comprises placing the page stack between a pair of alignment elements, each alignment element having a pair of substantially rigid and substantially planar support elements, each support element having a first and a second cover guide extending along an outside of at least a portion of a first and a second edge of the support element, respectively, the first edge opposed to the second edge, the first and the second cover guides separated by at least a height of the book cover, at least one of the support elements further having a first and a second page stack guide extending along an inside of at least a portion of the first and the second support element edges, respectively, the first and the second page stack guides separated by at least a height of the page stack; and

the pressure-applying step comprises applying a clamping pressure after the electrical current passing step to opposed sides of an outside of the cover along the support elements.

19. A system for binding a stack of pages to form a book comprising:

an electrically resistive strip positionable adjacent an inside of a spine of a flyleaf of a book cover, the strip having a hot-melt adhesive in contact therewith, the flyleaf inside a book cover, a spine of the flyleaf affixed to a spine of the book cover;

means for applying clamping pressure to a book assembly comprising a stack of pages inside the flyleaf, a binding edge of the page stack adjacent the strip, the pressure applicable to an outside of the flyleaf adjacent the strip and along a binding

edge of the page stack, the strip positioned between the flyleaf spine and a region of pressure application;

a source of electrical current positioned to pass electrical current along the strip to create heat sufficient to melt the adhesive, melted adhesive serving to bind together the binding edge of the page stack and to affix a first and a last page of the page stack to the flyleaf adjacent the flyleaf spine; and

a pair of spacing elements positionable between the book cover and the flyleaf outside, the spacing element along an outside of and adjacent the strip, the pressure application region located along opposed sides of an outside of the cover adjacent the spacers.

20. The system recited in Claim 19, further comprising a page stack carrier adapted to surround at least a portion of a free edge of the page stack, the free edge opposed to the binding edge, for retaining an alignment of the pages during the pressure application and current passing.

21. The system recited in Claim 19, further comprising a substantially squared-U-shaped holder having sides comprising jaws and an adjustable width between the jaws, the jaws dimensioned to clamp the book assembly along the pressure application region.

22. The system recited in Claim 19, wherein the electrical current source comprises a power supply attachable to a pair of leads, the leads connectable to respective ends of the strip.

5 **23.** The system recited in Claim 22, wherein the power supply is adapted to deliver a binding voltage of approximately 5 volts rms to yield a binding current of approximately 5 amperes rms.

10 **24.** The system recited in Claim 19, wherein the spacing elements comprise a pair of elongated, substantially tubular rods.

15 **25.** The system recited in Claim 19, further comprising a pair of alignment elements, each alignment element having a pair of substantially rigid and substantially planar support elements, each support element having a first and a second cover guide extending along an outside of at least a portion of a first and a second edge of the support element, respectively, the first edge opposed to the second edge, the first and the second cover guides separated by at least a height of the book cover, at least one of the support elements further having a first and a second page stack guide extending along an inside of at least a portion of the first and the second support element edges, 20 respectively, the first and the second page stack guides separated by at least a height of the page stack, the spacing elements comprising the support elements; and

 wherein the pressure application region comprises opposed sides of an outside of the cover adjacent the cover spine and the first side of the support elements.

26. A method of increasing usage of a printer and printing supplies comprising the steps of:

assembling a means for binding a stack of printed pages to form a book,

5 the binding means comprising:

an electrically resistive strip positionable adjacent an inside of a spine of a flyleaf of a book cover, the strip having a hot-melt adhesive in contact therewith, the flyleaf inside a book cover, a spine of the flyleaf affixed to a spine of the book cover;

10 means for applying clamping pressure to a book assembly comprising a stack of pages inside the flyleaf, a binding edge of the page stack adjacent the strip, the pressure applicable to an outside of the flyleaf adjacent the strip and along a binding edge of the page stack, the strip positioned between the flyleaf spine and a region of pressure application;

15 a source of electrical current positioned to pass electrical current along the strip to create heat sufficient to melt the adhesive, melted adhesive serving to bind together the binding edge of the page stack and to affix a first and a last page of the page stack to the flyleaf adjacent the flyleaf spine;

a pair of spacing elements positionable between the book cover
20 and the flyleaf outside, the spacing elements along an outside of and adjacent the strip, the pressure application region located along opposed sides of an outside of the cover adjacent the spacers; and

offering the binding means for sale.

27. The method recited in Claim 26, wherein the binding means further comprises a page stack carrier adapted to surround at least a portion of a free edge of the page stack, the free edge opposed to the binding edge, for retaining an alignment of the pages during the pressure application and current passing.

28. The method recited in Claim 27, wherein the spacing elements comprise a pair of elongated, substantially tubular rods.

29. The system recited in Claim 27, wherein the binding means further comprises a pair of alignment elements, each alignment element having a pair of substantially rigid and substantially planar support elements, each support element having a first and a second cover guide extending along an outside of at least a portion of a first and a second edge of the support element, respectively, the first edge opposed to the second edge, the first and the second cover guides separated by at least a height of the book cover, at least one of the support elements further having a first and a second page stack guide extending along an inside of at least a portion of the first and the second support element edges, respectively, the first and the second page stack guides separated by at least a height of the page stack, the spacing elements comprising the support elements.